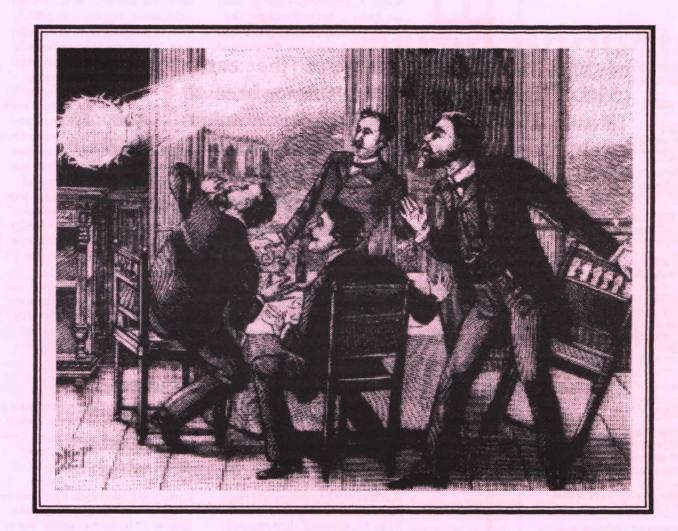
MAGINA



Ball lightning

Martin Shough explains why scientists take the phenomenon seriously

Viktor Schauberger: **Kevin McClure** explains why no-one should take the claims seriously; and **Gareth Medway** gives one good reason for taking Erich von Daniken seriously!



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On the BackPage I describe some features of the recent Fortean Times UnConvention that I thought of interest. Another point came up when we spoke to one of the Grand Old Men of British ufology, Lionel Beer (who, thank goodness, this year had been given a press pass!).

Beer is founder, vicepresident, and general eminence gris
of BUFORA, long hailed as this
country's foremost UFO organisation.
In it's pomp, in the seventies, it ran
conferences with dozens of speakers
and hundreds of attendees. Its
monthly meetings filled the
Securitate-style conference hall of
Kensington Central Library. Now,
Lionel tells us, the membership is
down to just over 200, and its bimonthly lectures are now held in a
room over a pub near Euston station.

Now how much of this decline is the result of a general decline of interest in ufology, and how much a result of BUFORA's abysmal management and relationship to its members is a matter for debate. Certainly, the current state of 'New BUFORA Bulletin' does not give the impression of being the organ of a flourishing group, with its sub-parishmagazine layout and rehashing of articles from decades-old issues.

But in faimess, there has been a noticeable increase in the numbers of UFO groups and magazines which seem to be in trouble. Even *International UFO Reporter* and *MUFON UFO Journal*, the doyen of American ufology, are struggling. MUFON is losing members faster than the Ba'ath Party, and IUN is struggling financially. Interestingly this recession does not seem to be affecting non-English language publications as badly (although we hear that the professionally produced Aix-en-Provence based *Phénomena*

may be having problems.) This is surprising, considering the smaller readership-base these publications have compared to English language publications. Scandinavian publications in particular seem in a healthy state despite almost no-one outside Scandinavia speaking the languages (except in Minnesota, of course)

How much of this decline can be put down to the Internet, which must be sucking readers away from subscription magazines? Talking to some other publishers at the UnCon, they confirmed this, but pointed out that the Internet is also a good way of publicising your publications to people who would not otherwise come across them. Certainly, the majority of new subscribers *Magonia* is now picking up are coming to us after finding our website.

So maybe it's down to just another periodic swing in public interest, or all down to war nerves or something, and if we hang around long enough the interest will come flooding back. We'll see.

And after that we have to announce a subscription increase for UK readers - our first for nearly nine years, a record that Gordon Brown's former friend Prudence would be proud of. However in those years postage, printing and other costs have gone on rising, so it means quite a big price jump to £7.00 for four issues. But as an alternative, we are offering UK readers the chance to take out a sixissue subscription (which has proven popular with European and American subscribers - you only get our irritating little reminders every eighteen months) for £9.50. The new rates apply with the subscription reminders in this issue, and we'll try to keep this rate steady for as long as we can.

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A SOCIAL HISTORY OF BALL LIGHTNING

Martin Shough

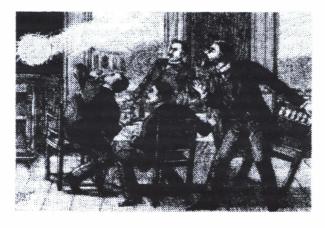
Back in 1967 the astronomer Gerard Kuiper dismissed a 10% residue of unexplained "UFO" reports with a wave of the hand, thinking it "reasonable to assume" that this testimony must be "so distorted or incomplete as to defy all analysis". Inconsistently, however, he advocated a major Defence Department/FAA programme to research "very rare natural phenomena" such as ball lightning. Why? Because "no adequate data yet exist of ball lightning", even though its existence had been "known for at least a century".(1)

This raises a very interesting question: How was it possible for science to "know" anything with "no adequate data"? The answer is that science did not "know", and as a whole declined to have anything to do with such stories "for at least a century". Unpicking some of the reason and unreason behind this curious condition of scientific double-think is instructive

Logically and evidentially speaking, there is precious little difference between a "very rare natural phenomenon" which is unexplained and an unexplained phenomenon characterised as a "UFO". Even more subtle is the distinction sometimes drawn between "a unique natural phenomenon never before observed" and a UFO. Because there will always be unique combinations of natural phenomena never before observed (in practice), how is a distinction to be supported be-

tween such effects and UFOs? One approach to this difficulty is to abandon hope of finding any distinction. But why does this collapsing of the phenomenological distinction not translate into a collapsing of the epistemological distinction? How can there then be "unexplained natural phenomena" which we say are allowed to be distinct from mere combinations of natural phenomena never before observed, and "unidentified flying objects" which are not allowed to be distinct? Is this classification a matter of sense or mere semantics?

The difference appears in practice to arise because there are two levels of "explanation" whose meanings are weighted differently in the two cases. There is a level of detailed physical understanding, i.e. a link-by-link chain of observed processes accurately modelled in theory; and there is a level of conceptual classification. When either of these levels is satisfied we experience a sense of accounting, and when both are satisfied there is a closure which we experience as "explanation". Neither in the case of "unknown natural phenomenon" nor in the case of "unidentified flying object" is the level of detailed physical understanding satisfied, by definition; the difference enters in the conceptual classification and has to do almost exclusively with the way these ideas are emotionally connoted. Specifically, it is the mechanistic aura of the former and the animistic aura of the latter that sets them apart. The history of science associates mechanistic models with productive explana-



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tions, animistic models with backward-looking resistance to explanations. The ETH and its analogues are for practical purposes regarded as examples of relict primitive animism.

Ball lightning (BL) emerges with some sense of "explanation" out of the primary category of "rare and unexplained phenomena" inversely as it replaces (these days) animistic with mechanistic connotations. The collective term is emotionally neutral, the terms "ball lightning" and "UFO" are not individually so, and parity is broken; a coupled particle-pair of overall neutral charge is, so to speak, dissociated into two particles of opposite charge which fly in different directions in the social field potential. The positive "ball lightning" particle is eventually scavenged by surrounding atoms of incomplete theory; the "UFO" particle is left to wander, a free negative ion in a lonely search for an appropriate and approbatory - theory with which to recombine. It is a pragmatic fact that an animistically connoted interpretation of an unexplained phenomenon is not supported by the usual socialinstitutional legitimations of science as a valid "explanation". This is quite separate from the question of evidence.

It was also in 1967 that the distinguished British physicist and erstwhile intelligence mandarin R. V. Jones opined that most witnesses in cases which could not be explained had probably made "substantial errors", and that "flying saucers" were therefore almost certainly a "fantasy"; whereas the same corpus of "substantial errors" allowed him to conclude that "an as yet unrecognised natural phenomenon" was "distinctly possible". In illustration of this he noted that BL "has long been both asserted and disputed" and could perhaps be a similar sort of case. But he objected that unexplained UFO cases, in contradistinction to BL, were never reported by scientifically trained observers, finally declaring that "little short of a tangible relic would dispel my scepticism of flying saucers." (2) The error of fact here (a great many unexplained UFO reports have been made by scientifically trained, indeed scientifically illustrious, observers) seems almost negligible beside the tangle of category mistakes, non sequiturs

and imported assumptions in which it is embedded.

Exactly similar objections continue to be heard regularly as the 21st century dawns, and it is fascinating to be able to record that it has all been said before. Respected authorities such as Humphreys, Hagenguth and Berger in the 1930s, '40s, '50s and even into the '60s regularly dismissed BL in much the same language.

Of course no one has ever recovered a "tangible relic" of ball lightning; photographs and films have all been refuted by these sceptics as hoaxes, lens flares, streetlights, fireworks and so forth; eyewitnesses were regarded as an unreliable source of data, and were said to have misreported ordinary lightning, burning debris or retinal afterimages; reports of burns and damage were said to be due to ordinary lightning strikes, unrelated fires or hoaxes: there were no concrete data in new reports and "fantastic stories" from the past were hardly scientific evidence; reports rarely seemed to be made by scientifically trained observers, often by peasants, labourers and other credulous laypersons; lightning experts declared that their long surveys with panoramic cameras had never so much as caught a glimpse of anything like ball lightning; and anyway, darting, drifting spheres of light were physically impossible, as no small volume of atmospheric gases could sustain the reported energies of the balls for even a moment by combustion or ionization, let alone move around for many seconds or even minutes against the wind, pass down chimneys and squeeze through keyholes. In short the authoritatively sanctioned view, shared by the dominant majority, was that the whole thing was utter nonsense, belonging with tales of sulphurous demons and seaserpents.

Then along came the early days of research into nuclear fusion, and the concept of electromagnetic containment of hot plasmas. Lightning channels were such plasmas, confined in one dimension: could stable plasmas, confined in three dimensions, form in nature? The idea was no more than an analogy, but one which prompted a few physicists to look again at the reports. It turned out that self-confinement in the free

atmosphere by means of electromagnetic forces alone would not work, and realistic energy densities could not be found; but it was a start, and gradually more people began to talk as though the reports were not quite so wild after all. Perhaps, suggested Peter Kapitza in 1955, such a plasma could be externally fed by the energy of intense, high-frequency radio fields associated with storms? No such radio fields were discovered, and calculations showed that the energies available would be too small to support a lightning ball in this way, but the principle was a breakthrough. There were still no unimpeachable films, photographs or instrumental data; no "baby Kugelblitz" had been captured and analysed. But suddenly it was no longer preposterous to think of lightning balls floating down chimneys to terrorise people in their kitchens, for example, because the radio energy sustaining the ball would tend to be ducted as in a wave-guide.

At about this time military scientists began to conceive the idea of an energy weapon based on plasmoid projectiles, synthetic thunderbolts which would be capable of vapourizing the toughest armour, and research began during the next few years to generate controlled "lightning" balls in the laboratory. By the early 'sixties, the Berkeley Radiation Laboratory of the University of California had developed a prototype plasma-weapon that expelled annular deuterium plasmoids at impressive velocity. It was thought that military applications of such weapons might be found in space, either in "killer" satellites for disabling the new generation of spy satellites or as defences against ICBMs. The US Air Force Office of Scientific Research (AFOSR) began funding expensive secret programmes which were mirrored by similar efforts in the Soviet Union.

Meanwhile other theories of natural BL came and went, such as cosmic rays focussed by the electric fields in thunder-clouds. There was a quantum-mechanical model involving a cold, dense electron gas self-confined by exchange forces, and even one which proposed spontaneous thermonuclear reactions: An unsuccessful, but nonetheless remarkable, efflorescence of ingenuity springing from what until

recently had been (and to some still was) so much mere "humbug". Slowly the barometer of professional opinion continued to swing, so that despite a notable paucity of concrete evidence and an observational database inevitably corrupted by misinterpretations, hoaxes and old-wives' tales, the once-derided "ball lightning" began to exist in the very practical sense that there was a widespread and growing consensus. At last scientists could start doing science.

Then in 1964, working on a grant from AFOSR administered through the Air Force Cambridge Research Laboratories (AFCRL), two physicists at Yeshiva University in New York built on Kapitza's idea and came up with the first nearly-workable theory based on dielectric inhomogeneities in d.c electrical fields which remained the basis of further developments for many years. Now, thanks to the thirst for militarily useful ideas and the efforts of Finkelstein and Rubenstein, it was possible to give mathematical form to a model which explained many of the shapes, colours, movements, odours, noises, temperatures and durations which had been reported and scorned for generations

Spheroidal and ellipsoidal forms turned out to be the only stable solutions of the field equation. These plasma forms could also be shown to behave somewhat like elastic solids, which explained the oft-reported "bouncing" motion of lightning balls. Later refinements based on lowfrequency a.c. fields, such as have been observed in association with lightning, were developed by Edmond Dewan and others working at AFCRL.(3) This explained the reported persistence of BL indoors by getting round the problem that in d.c. fields even non-metallic building structures tended to behave like conductive Faraday Cages. The fit between theory and observation was improving, and although a completely satisfactory theory remained (and still remains) to be worked out, it was at last permissible for lightning balls to behave much as, in fact, they had always behaved: bouncing, swooping, hovering, "investigating" chimneys and rooms, "pursuing" objects and people, sneaking through windows, keyholes and drainpipes.

By this time many physicists had begun exercising some creative hindsight, and history, as always, was written by the victors. Ball lightning began to be cited as the sort of novel phenomenon that objective science was always ready to embrace,

ball lightning.

Besides having unimpeachable witnesses, ball lightning could boast quantitative data, too. Back in 1936 a Mr. W. Morris, a resident of Dorstone, near Ross-on Wye, Herefordshire, reported that a fireball "the size of a large or-



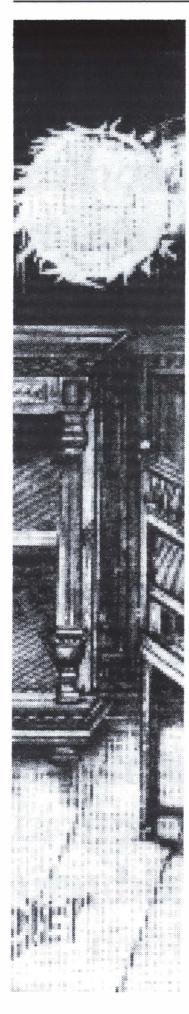
provided only that there was good, reliable evidence. One began to hear about the fine qualifications of witnesses who had previously been ignored and derided.

In 1967 R. V. Jones was now able to point out that BL had been reported by no less an observer than a former Deputy Director of the UK Meteorological Office, although the worthy Mr. Durward's two separate experiences with ball lightning back in 1934 and 1938 had singularly failed to impress the scientific world at the time, and years later had been dismissed by Swiss lightning expert K. Berger as one of those unevaluable "fartastic stories from the past". (4)

University of California physicist Leonard Loeb now felt secure enough to pronounce that lightning balls "have been too often seen and described by competent observers to be classed with flying saucers. They are not illusions." (5) And aviation journalist Philip Klass confidently explained in articles in 1966 (6,7), and in a book two years later (8), that many puzzling reports of so-called UFOs could in fact now be explained as

ange" had descended into his water butt, which he said had contained "about four gallons of water". The water boiled for "several minutes" and even after twenty minutes was too hot to touch. Few people took much notice of Mr. Morris in 1936, but this feast of observational data has been richly savoured in more recent years. In 1966 the University of Colorado was contracted by the US Air Force to assemble a Report which would be a grand epitaph to its 20-year role as UFO reportcollection centre for the American public, a study known as the Condon Report about which much has no doubt been heard in these pages. Not surprisingly BL made its appearance therein and Mr. Morris's immortal fame was once more celebrated

Martin D. Altschuler, a solar physicist then working at the National Center for Atmospheric Research, prefaced his discussion of UFOs and atmospheric electricity in the Condon Report by noting that BL "although witnessed and reported many times in the past, has only with difficulty been established as a genuine scientific



problem. Years of patient effort," explained Altschuler, "were required to distinguish ball lightning from retinal after-images and optical illusions." One may doubt that the witnesses, after years of patient and thankless reporting, would much appreciate the "effort" of science in this regard. But it is certainly true that years of patient effort have since been devoted to theoretical analysis - most of it based on the world-famous 60-year-old rain barrel observation of Mr. Morris.

Describing this antique report as a "singular" piece of evidence upon which much research has focused. Altschuler proceeds to assume that the initial water temperature in Mr. Morris's barrel was 20C, that 1 litre of water evaporated from the barrel, and that the remaining 17 litres was raised to 90C, concluding that a plasma 10 cm in diameter must have had an energy density of 5 x 10⁹ joule/m, an order of magnitude greater than the energy density of an equivalent volume of singly-ionised air. Much depends, says Altschuler, on reliable energy estimates of such fireballs, and although these data have serious implications for some theories of ball lightning formation there are sufficient well-documented reports implying very high energy densities to "make the water barrel report very believable". (9) It may be doubted whether water standing outside in a barrel in Herefordshire in October would be at 20C, but never mind; one is impressed by how much may be inferred from so little, and is led to wonder in turn why, so consistently, nothing whatsoever can be inferred from reports of other aerial phenomena currently languishing in the holding category of "unidentified flying objects".

The Condon Report characteristically stopped thinking about any such story the moment that it became evident that it could not be explained, appending the conclusion that it "cannot be verified or refuted" or that the lack of tangible evidence rendered it "of no probative value". This has been the extent of scientific ingenuity for fifty years and is plainly less than helpful. True, certain promising "unknowns" were considered at a special conference of atmospheric and plasma physicists to see if they had any relevance to the study of BL and related phenomena. The general conclusion was that they probably did not, which of course put a stop to curiosity. "All participants agreed," records Altschuler, "that the UFO cases presented contained insufficient data for a definitive scientific conclusion." End of story. Oh, but Altschuler invited people to write or 'phone in with any sightings of ball lightning.

"The size of an orange"?
"Several minutes"? Surely we can
do better than this. The amount of
latent information in large numbers of still-unexplained UFO reports is colossal by comparison.
Perhaps some of the phenomena
would turn out to be relatives of
BL, and perhaps some would not,
but certainly we will never know
if we exert disproportionate negative pressure on efforts to find out.

The Condon Report made space for Gerard Kuiper to peer down his nose at "this odd and discouraging assemblage of data", an ill-perfumed rabble beside the seemly decorum of BL reports; and made space for R. V. Jones to perpetuate the dual myth that BL gained scientific sanctity due to reports from trained observers, whereas "flying saucers" were sadly less fortunate in being so often sponsored by hoaxers, liars, the deranged and the merely dull, never by wholly reliable people. Of course, added Jones as a rider, it was quite possible that the tiny residue of unexplained reports from those few who were somewhat less dull could easily have been . . . ves, misinterpretations of ball lightning.

Now every conscientious sceptical investigator would recognise that there are some intriguing reports among that fluctuating residue of "unknowns" that represents the "evidence for unidentified flying objects". Simple logic says that a conscientious response must allow it to be possible that remarkable phenomena are observed. However, he or she might well feel that "intriguing" was slim evidence on which to found an animistic theory of extraterrestrial incursions. This is a very honourable position to take. But it is a difficult position to maintain, under tension between the opposite lazy equilibria of "debunking" and "believing".

Take the "Lakenheath-Bentwaters case", a famous cause celebre soon to be the subject of a comprehensive web archive.* It

remains a fascinating microcosm of the whole debate nearly half a century after the first investigation. still unresolved despite a huge amount of new information. By this I mean, of course, that it isn't resolved either as a simple and well-understood event or as a spaceship. The most one ought to say about the "rare and unexplained phenomena" in this case is that radar-reflective somethings in the atmosphere probably behaved in ways that stretch the theory developed to explain other radarreflective somethings in the atmosphere. That isn't to sav much. For most people it isn't enough. And because the information needed to explain in terms of link-by-link physical processes is lacking we tend to skip to the explanation-level of conceptual classification. On this level the issues become cathected and "important", primitively polarised between mechanistic and animistic tendencies, and here the psychological desire for closure pulls us in the direction of incredulity or of credulity. Some give in to their sense of wonder, others to their sense of disgust. If it were a report of "ball lightning" everyone can see that the debate would have a wholly different complexion: Enchantment would not be embattled with its self-generated alter ego Disenchantment. The problem would be able to remain on the level of "phyical process" explanation because the "conceptual classification" issue has been resolved in the act of naming.

This sounds such an attractive proposition that one is tempted to jump in on the side of sceptics, because surely one is saving that without the animistic ETH and similar tosh we could get on with some science. But this is not correct reasoning. The success of this strategy in the case of BL does not guarantee that it will translate to the case of UFOs despite the centuries of momentum behind the success of naturalistic theories everywhere else in physics. The fact is that today extraterrestrial intelligence (and a boggling array of hyperspatial analogues) is a naturalistic concept with wide currency in physics. Like the principle of self-contained stable plasmas in the free atmosphere in 1930, it isn't yet a valid explanation of anything. But it could be. This is the door which somehow has to be held open

against the pressure of what feels like irresistable improbability.

It is understandable even, in some way, commendable - that an incompatible idea transplanted into the body of science risks triggering a sort of psychological tissue rejection. Modern minds are accustomed to classifying and systematising the world around them in a more focused way than "natural philosophers" were once wont to: the scientific trophy cabinet is packed to the doors, and there is little room today for the sort of vague tolerance that in centuries past might have been happy to call these events "tropospheric pseudo-meteors" and leave them be. Today we either understand phenomena (broadly speaking), or we are in the process of polishing up our understanding, or else we are clearing them out with all the uppish vigour of a house-proud hostess appalled by the discovery of a piece of cheap china behind the silverware.

Tropospheric pseudometeors? If such a classification had any sensible scientific meaning then we would no doubt chorus, "Ah yes, of course!" and it would no longer be necessary to whinge on about the fallibility of human perception, the absence of material evidence, of films and instrument readings, and people could simply get on with the job. The incident would suddenly be snatched from the fuscatory darkness into the light of Science, who would smoothly claim it for her own and build an academic discipline of Tropospheric Pseudometeoritics

But then isn't this the point? There is no such discipline precisely because there is no proof that it would have anything to study, and there can be neither proof nor progress without hard data. How can there be a science of memories, probabilities, paper histories, hunches and inferences? Okay, maybe something did leave its mark momentarily on a few human retinas in 1956, and maybe its radar echoes did leave their glowing traces for a few seconds on the tube phosphor of a few radar scopes. But how can we do research without something to get our hands on, something that absolutely cannot be gainsaid? Maybe something was there, and maybe not; but even if it was, it has long gone and we don't know what it meant.

And perhaps we never will. But by a serendipitous quirk of fate, on August 12 that year about 9.00am GMT on the very day before our "UFO" reportedly pursued a jet over Lakenheath - an instructive and analogous event occurred 1800 miles away in the skies over the lower Tambovsk region of what was then the USSR. A glowing reddish-orange sphere approached a commercial aircraft flying near thunderclouds at 10,000 feet. It was ahead of the aircraft off the port side and closing rapidly. Watched by three aircrew from the flight deck it passed close by the nose then suddenly swerved back around the fuselage and impacted the port propellor with a flash of light and an audible explosion that rocked the aircraft. Upon landing nothing, reportedly, was found except a very small fused area at the tip of one propellor blade and a small patch of soot that could be wiped off with a finger. Doubtless some sceptical meteorologists at the time explained that a smudge of soot was not really proof of anything, that it was probably caused by a minor lightning strike of the usual kind and that the witnesses had mistaken retinal afterimages of a lightning flash for a swerving ball of fire.

Now, I say all this happened. Possibly you even believe me. And why not? Today this story appears in scholarly discussions of BL, cited without question not as something that happened "reportedly" or "allegedly" but as a matter of historical fact. (7.8) You maybe feel an urge to go and interview ageing witnesses or translate vellowing maintenance logs scribbled in Cyrillic pencil. But I doubt it. And yet is this mysterious aerial phenomenon really much different from the phenomena we are considering here? Is that ambiguous mark which was "reportedly" found on the tip of a long-scrapped Soviet propeller blade forty-five years ago, and which no one reading this has ever touched or seen, so very much more "real" than the luminous marks which appeared on US and British radar screens some hours later?

One's instinct is to reply: "Ah, but we could have touched and measured that mark ourselves, had we been there, and someone did. That it was not us is merely an historical accident." In-

deed. And we could have observed and measured the blips at Lakenheath, Bentwaters and Neatishead, too, had we been there; we could have flown that Venom, had we been there; maybe we could have seen that blur of light speed over the Bentwaters airfield, and seen the erratic manoeuvres of other lights over Lakenheath, had we been there. A number of people were there, and they say they did.

This is not to conclude that the Lakenheath/Bentwaters objects were ball lightning. There are certainly epistemological parallels to be drawn - and, it may be, physical ones too. But in comparison with many of the extrovert traits of so-called ball lightning, the "UFOs" we are concerned with seem relatively staid. None of them entered an aircraft cockpit to burn off the pilot's eyebrows, for example, or inexplicably undid all the metal screws in a piece of telegraph apparatus, or spiralled around a domestic kitchen before carrying several curing hams away with it up the chimney and scattering them in the street - all of which have been earnestly and "credibly" reported by BL witnesses. Instead we have to account for luminous bodies in generally linear (sometimes rectlinear) motion through the sky, one of which behaved as though drawn towards an intercepting aircraft. Why should this be so very preposterous? The luminous something that reportedly overflew Bentwaters did so at tremendous speed, but not faster than a charge might track along a conductor for instance. And the Lakenheath primary object behaved possibly in a capricious but not in a supernatural fashion. There is no reason to suppose that these behaviours could not be understood with a little effort, and it may be that the physics of BL is a good point from which to start.

One tactical reason is that calling a phenomenon "ball lightning" simplifies an agonisingly raddled epistemology - it does wonders for witness credibility. When scientists cite dramatic tales of BL they don't apply forensic chain-of-evidence rules with the same pedantic rigour that they are wont to insist on in the case of UFO reports. This is not because the eye-witness evidence they're citing is of a different character; it's because the existence of a consensus allows them to lighten



The past rejection of BL was an exaggerated inference - but a very plausible inference - from natural caution that we need to understand if we are not to be condemned to repeat it.

up and start to think positively instead of curling up and thinking negatively of what they stand to lose

In a letter John Rimmer suggests: "Misinterpretations, radical or otherwise, may well be as significant a part of BL sightings as they are of UFO reports. However, as science has established a comfortable phenomenological niche for such reports, perhaps the impetus to identify and eliminate misinterpretations from the data base is not as strong amongst BL researchers?"

This is very possibly true, and it would be interesting to suggest to BL physicists that they should study UFO research with a view to sharpening up their attitude to their data. What, I wonder, would they take from it? What would they make of the polarisation of psycho-social and physicalistic assumptions in this field? Would they be persuaded that the new physics they've begun to invent to explain BL was unnecessary? Would they conclude that if only they'd known about the Robertsian RMP (Radical Misperception) theory earlier then they needn't have bothered?

Probably not, because they and RMP are old 'friends'. They've grown apart from it, and are embarrassed by that immature liaison. BL physicists don't really like to be reminded of the fact that RMP was the default position of science with respect to BL ever since it was first recognised. A century ago, or less, the suggestion that there was a genuine atmospheric phenomenon called BL - no matter how corrupted its database with misperceptions - would have been heretically avante garde. Then, there was no BL at all in the view of the orthodoxy of the day, and all reports of it were explained away by a Victorian equivalent of the RMP theory. If the present orthodoxy refers to this fact it tends to be in language that celebrates the success of scientific hard work, of which in fairness there has been a great deal. But I never hear an apology to the witnesses. I never hear an admission of any failing. Of course the "blame" lies at the door of a vanished - or vanishing - era and one cannot take responsibility for the past.

Still, this loud silence does to me speak of a lesson not learned. The lesson of BL for ufology is twofold. Firstly, that one needs to be careful about drawing a general conclusion from the fact that a theory of misperception is plausible in general and demonstrable in particular cases. A catalogue of resolved cases is not a theory. As John Rimmer points out: "If BL, like UFOs, only exists via eyewitness reports, it seems to me that the general scientific acceptance it has received, vis-a-vis UFO reports, is probably unjustified, and perhaps here is an area where some IFOs might be reclassified as UFOs with sufficient investigation."

This is probably quite true. There is nothing in science or logic that says signal cannot coexist with noise. In fact the situation in any sampling is that noise is universal, and a set of data which has too-sharp a peak of pure signal with no noise would typically suggest fraud, or a filter due to some artifact of the measurement process.

Secondly it is not enough just to assemble catalogues of mysteries. The unsolved mysteries open the door to the possibility of new knowledge, but they do not constitute new knowledge. A list of unresolved cases is not a theory either. The sceptics are right that they do not have to take a residue of intriguing mysteries seriously until someone comes up with a link-by-link chain of evidence matched to a testable new theory that predicts specific measurable effects. But at the same time that doesn't mean that it is the sceptic's role to discourage such efforts - that is the debunker's role and it can be done without. It is useless to science. No testable theory was ever produced by negativity and pessimism.

On methodology in science Percy Bridgeman wrote: "The only possible attitude to the facts of experience as it unrolls is one of acceptance. . . . In particular, since there is no means by which we can foresee the future we cannot tell in advance whether any

mental device or invention will be successful in meeting new situations, and the only possible way of finding out is to try it."

This is what happened with BL. Cerrillo in the '40s and Kapitsa in the '50s, then others, began to explore the "what if?" questions. They "tried out" the idea that at least some witnesses were describing something real and novel and came up with sketches of theories. Some of their peers then started to get the idea that maybe physics could model BL after all, and that's how the stories changed from old-wives' tales to reports. All of a sudden, what had previously been hearsay of no probative value now became a fit subject for research grants. Serious analysis was begun on collections of BL tales - the same tales, not new and instrumentally validated ones

The world-famous "rain barrel observation" wasn't an experiment in a refereed journal but was the subject of a letter to a newspaper in 1936! I still get a shiver of delicious irony from recalling Altschuler's sober contemplation of the constraints placed on physical theory by the implied energy density of Mr. Morris's "orange"-sized lightning ball. No one at the CU Plasma UFO conference seemed concerned that Mr. Morris may not have known a tangerine from a pomegranate or that his heirloom fob-watch might have stopped.

Are the BL theoreticians wrong? Is there no 'new empirical phenomenon' called BL? Or did they make a good judgement call on "insufficient data" and thereby generate a scientific conclusion whose definitiveness is selfjustifying? If they are right - and a virtual consensus now says that they are - this emphasises the importance of helping to facilitate a climate of productive and original theorising in ufology alongside a rigorous winnowing of the noisy evidence base. The past rejection of BL was an exaggerated inference - but a very plausible inference - from natural caution that we need to understand if we are not to be condemned to repeat it.

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THE SCHAUBERGER ERROR

Kevin McClure

It's much easier to dismiss an absurd claim that is fresh and new, than one which has been around for a while, and has taken root. It is, for example, simple enough to assess the reliability of David Icke's assertion that Dr Josef Mengele - seemingly after he died mind-controlled a young American woman to make her go to Balmoral Castle, and officiate at rituals where the Queen and Queen Mother turned into reptiles and devoured small children. Or to judge whether, as 'Sir' Laurence Gardner tells us in an explanation on which his whole 'grail bloodline' theory depends, the otherwise unmentioned daughter of Joseph of Arimathea (in this version, the brother of Jesus Christ) popped over to Wales to marry and settle down with Bran the Blessed, a mythical god-figure who spent much of his life as a detached head and who, even in the relevant myths, would have been well over 100 years old at the time of the marriage.

Dislodging established and much-repeated nonsense is much more difficult, but that doesn't mean we shouldn't try. And where that nonsense tends to exaggerate and glorify the activities of the SS during World War 2, I think we should try particularly hard. In that spirit of endeavour, let's see what we can do about the very untrue story of Viktor Schauberger - builder of flying saucers.

The detailed and ever-increasing fiction of the Nazi UFO mythos tells us that the Nazis, whatever the actual outcome of the Second World War, were so

technically, creatively and scientifically brilliant that had the war only lasted a few months longer, they would have won it by using their amazing flying saucers, which were so very nearly ready for combat when the Allied forces went into Czechoslovakia and Southern Germany. My essay 'Phoney Warfare', available on the *Magonia* website, records my research into the Nazi UFO mythos up to mid-2000, since when I have continued to try to evaluate each new account as it emerges.

There are two hurdles the mythos has always fought to overcome. Firstly, that there is no historical record whatever of the standard characters said to have been involved in saucer development. Names like Schriever, Belluzzo, Habermohl, Miethe and Klein appear regularly, but there is no evidence for the involvement of any of them in the development of flying discs. Only Guiseppe Belluzzo has any verifiable scientific background at all, Schriever was a delivery driver, and it is unclear whether Habermohl and Miethe even so much as existed as identifiable individuals.

Secondly, there is no historical evidence - physical or photographic - of the supposed flying discs. We are repeatedly told of discs of immense power, and sometimes immense size, defying all scientific parameters known before and since. Yet not so much as a bolt or a tachyon drive remains. The only evidence presented - and repeated so often is by way of the tinny, fuzzy post-war photos taken by those who wished to convince us of saucer reality, but who usually succeeded only in persuading non-believers of the unexplored potential of domestic containers and the art of close-up photogra-



For those who want to further the. cause of secret Nazi science. maintain the flying saucer mystery, or both. Vikter chaubemer has en a player allswered

phy. The mythos argument is that rather than being extraterrestrial in origin the discs were actually developed from captured Nazi blueprints, by captured Nazi scientists. Relocated in America, they chose to have their miracle craft chug unimpressively around the dusty back roads of the USA, sometimes landing, sometimes crashing, and sometimes - particularly the very small discs - utilising conveniently placed string to hang from trees, swinging gently and photogenically in the wind. Not a single claim of flying Nazi discs predates either 1949, or media interest in flying saucers in the USA.

Once upon a time, in Austria, there was a forester called Viktor Schauberger. He lived from 1885 to 1958, and in his long life he devised and worked on a variety of inventions. He had a keen and original interest in the motion and motive potential of water, and the most notable of his achievements were probably in the design and development of log flotation methods and flumes in the 1920s. Thereafter, he appears to have attempted to develop his ideas of the motion of water and air towards the production of turbines and of cheap, natural power and energy. There is little, and possibly no evidence that any of these later, more ambitious ideas ever reached fruition, and although his son and grandson have continued with some more theoretical aspects of his work, it seems that no repeatable demonstration of Schauberger's technology has ever taken place. He died in 1958, and no tangible example of his supposed wartime or post-war experiments survives him

For those who want to further the cause of secret Nazi science, maintain the flying saucer mystery, or both, Viktor Schauberger has been a prayer answered. Not because he actually built flying discs for the Nazis, but because some round, bulbous inventions he may have worked on were photographed and, with a bit of airbrushing, adding Luftwaffe insignia and so on, they looked rather like the round, bulbous inventions that featured in 1950s ufology. That he left no physical or technical evidence of his supposed disc experiments, was at times somewhat confused about the facts (there is evidence that he spent some time in a psychiatric hospital), and kept a diary in a

shorthand that was difficult even for his family to comprehend, could only assist in using his name. He even had a long, grand beard to suggest that he was a misunderstood genius. History was ripe for rewriting, and not just the once.

The mythos itself has had three distinct phases of life, with long fallow periods between. The first was in the early Fifties, when a handful of individuals, none of them connected with any post-war rocket or aviation programme in Russia, the USA or anywhere else, claimed to be at least partly responsible for the saucer sightings of the period. Schauberger - still alive at the time - didn't get a mention at that stage, and made no claim of his

Then, around 1975, Canadian Ernest Zundel, also known as Christof Friedrich and Mattern Friedrich, and notorious for his pro-active and well-publicised scepticism of the reality of the Holocaust, published - as Mattern Friedrich - the book UFO - Nazi Secret Weapon? Amid questions like 'Is Hitler Still Alive?' and 'Did the Nazis have the Atom Bomb?' he set out a range of wild speculations about lost Nazi technology and, for the first time to my knowledge (I could easily be wrong), introduced a number of the key elements of Schauberger's involvement. Zundel savs:

"Schauberger did experiments early in 1940-41 in Vienna and his 10 foot diameter models were so successful that on the very first tests they took off vertically at such surprising speeds that one model shot through the 24-foot high hangar ceiling. After this 'success' Schauberger's experiments received 'Vordringlichkeitsstufe' - high priority and he was given adequate funds and facilities as well as help. His aides included Czechoslovakian engineers who worked at the concentration camp at Mauthausen on some parts of the Schauberger flying saucers. It is largely through these people that the story leaked out."

Zundel also invented an account of Schauberger's later history and death. Although he actually died at home in 1958, Zundel's story is that

"Viktor Schauberger lived for some years in the United States after the war where he was reported to be working on UFO projects. His articles were greatly discussed and then one day in Chicago he just vanished. His battered body was found and as to who killed Schauberger or why has never been discovered. One version has it that gangsters tried to beat his revolutionising secrets out of him and accidentally killed him."

Zundel also published the first drawings - presumably from photos - of what he called the 'electromagnetically-powered Flying Hats'.

In the next year, 1976, a biography of sorts appeared (*Living Water*, Gateway Books, 1997), written by Olof Alexandersson, a Swedish 'electrical engineer and archive conservationist'. While admitting that "the information for the basis of this book is fragile", he managed, from unlisted sources, to add substantially to the mythos...

"After a while Schauberger received his call-up. It was now 1943, and even older men were being drafted. He was eventually appointed the commandant of a parachute company in Italy, but after a short stay, orders came from Himmler that he should present himself at the SS college at Vienna-Rosenhugel. When he arrived, he was taken to the concentration camp at Mauthausen, where he was to contact the SS standartenfuhrer (standards leader) Zeireis, who told him he had a personal greeting from Himmler. We have considered your scientific research and think there is something in it. You can now either choose to take charge of a scientific team of technicians and physicists from among the prisoners, to develop machines utilising the energy you have discovered, or you will be hanged.'

"Schauberger understandably chose the first (insisting that his helpers must no longer be regarded as prisoners) and so an intensive period of study began. After the SS college, where the research was taking place, was bombed, Schauberger and his team were transferred to Leonstein, near Linz. The project they initiated there was a 'flying saucer' powered by a 'trout turbine'.

"The results of the research were surprising. It was both a success and a failure. Viktor Schauberger later explained this briefly in a letter to the West German defence minister Strauss on 28 February 1956:

"I preferred the first alternative, and about a year later, the first 'flying saucer' rose unexpectedly, at the first attempt, to the ceiling, and then was wrecked."

Alexandersson produced slightly different pictures of the 'flying hats', probably just removing the Luftwaffe insignia Zundel had added, and reproduced drawings of other absurd imaginary wartime UFOs copied directly from Zundel.

Since then, architect Callum Coats has published a series of books which cover that confusing territory between science and esotericism, reflecting a surprisingly persistent interest in Schauberger's theories about water and implosion. In 1996 (Living Energies, Gateway, 2001), he published what appear to be actual photos of the 'flying hats', as well as reprinting earlier drawings, and tells us that

"Despite its compact size, this machine generated such a powerful levitational force that when it was first switched on (without Viktor Schauberger's permission and in his absence!), it sheared the six quarter-inch diameter high-tensile steel anchor bolts and shot upwards to smash against the roof of the hangar."

However, the sight of the objects themselves only underlines the unavoidable truth that the only factor uniting all those who tell us about the reality of the Schauberger flying saucers is that none of them have the least idea of how or why they flew. Indeed, it is hard to imagine how they could.

Coats also quotes one 'A. Khammas', writing in the undated issue 93 of *Implosion* magazine:

"There are many rumours about what Schauberger was actually doing during this period, most of which suggest he was in charge of developing 'flying discs' under contract to the army. It later became known that the 'flying disc' launched in Prague on the 19th of February 1945, which rose to an altitude of 15,000 metres in three minutes and attained a forward speed of 2,200 kph, was a development of the prototype he built at Mauthausen concentration camp. Schauberger wrote, "I only first heard of this event after the war through one of

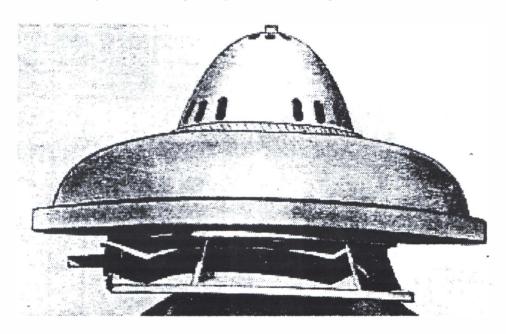
the technicians who had worked with me". In a letter to a friend, dated 2nd August 1956, Schauberger commented, "The machine was supposed to have been destroyed just before the end of the war on Keitel's orders."

Perhaps we should find it significant that, while we are told that Viktor Schauberger effectively rewrote aviation technology with two extraordinary demonstrations of the power of the engine he invented, we are also told that he was both absent from the events, and unaware that they would take place.

The most recent phase of belief in the Nazi UFO mythos began in the last five years. Susan Michaels, in *Sightings: UFOs* (Fireside, 1997), reproduces a

Bill Rose wrote an article, tagged as 'UFO sightings - why you can blame Adolf Hitler', in the popular science magazine *Focus* (October 1998). After, apparently, four years of research he concluded that

"The father of the German disc programme was Rudolph Schriever, a Luftwaffe aeronautical engineer assigned to Heinkel in 1940 . . . a full-sized piloted version, the V2, first flew in 1943 with Schriever at the controls. Thirty feet in diameter, the V2 had a fixed central cabin around which a ring with adjustable vanes rotated to provide thrust in both the horizontal and vertical planes. Early in 1944, Schriever's topsecret programme was moved to Czechoslovakia . . . Schriever was joined by a number of leading



range of palpable fictions from unreliable sources, and introduces some freshly minted nonsense. Possibly becoming confused by inconsistent, fictional accounts of a meeting with Hitler in 1933, she says:

"Also in 1939, German physicist Victor Schauberger developed a design for a flying saucer using energy he claimed could be hamessed from the tonal vibrations, or 'harmonics', of the cosmos. As far-fetched as this theory seems, Schauberger's research attracted the attention of Adolf Hitler, who offered to provide funds to build Schauberger's own antigravity saucer. But Schauberger, who was a deeply committed pacifist, turned Hitler down."

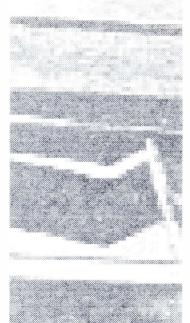
The following year, aviation writer and photographer

aeronautical engineers . . . Another addition was the Austrian scientist Viktor Schauberger, who just before his death in 1958 claimed to have worked on a highly classified US disc programme in Texas."

Rose seems to be the first to have suggested that Schauberger actually worked together with the four other 'engineers' who the mythos says built flying saucers. Actually, even when those who actually said anything made their claims - Klaus Habermohl never said anything, probably because he didn't exist, and Richard Miethe may have been someone else entirely who lived in Egypt they never made that one. But even Rose doesn't have the same remarkable sources as, it seems, did Gary Hyland, the author of Blue Fires (Headline, 2001), who



Try working out
who invented all
these tales, and
whether anyone
apart from the
authors involved
has gained
materially, or in
achieving political
or personal aims,
as a result of their
dissemination.



says of Schauberger:

"The first test-flight of the machine was reportedly amazingly successful (it apparently shot through the roof of the laboratory and had to be recovered some distance away) . . . he developed his ideas further, to the point where a full-sized, though unmanned flying disc prototype that used his new engine apparently flew under radio control . . . At the end of the war. the American forces got to Leonstein ahead of the Russians and found Schauberger and his team of experts. After letting the members of his team leave after a thorough interrogation, the Americans held Schauberger in protective custody for six months; it would seem that they knew exactly what he had been up to and wanted to prevent other nations, as well as renegade Nazis, from continuing to use his services."

Exceeding even the rich imaginations of Michaels, Rose and Hyland lie those who provided the information underpinning the much-publicised book The Hunt for Zero Point (Century, 2001) by Nick Cook, a notable freelance aviation journalist who has written for the very respectable Jane's Defence Weekly. In the course of an investigation lasting, we are told, some ten years, he appears to have been comprehensively misinformed by a series of individuals, or perhaps by individuals acting on behalf of a group of people with a specific agenda. It seems that for all the informants he gathered along the way - informants he often protects with anonymity nobody ever warned him that those who want to make the Nazi regime, and the SS in particular. look good, are unsurprisingly happy to deceive to do so.

Without going through Cook's oddly directionless Hunt in any detail, it's worth noting that his primary source about Schauberger was a Polish gentleman named Igor Witkowski. Witkowski, apparently, volunteered to drive Cook around, showing him sites where Schauberger had worked for the Nazis, constructing and testing 'The Bell', a supposed experimental device with two cylinders spinning in opposite directions. Cook was told that this glowed blue and destroyed plants, birds, animals, and sometimes humans. Internet searches for Witkowski bring him up in connection with the loopy,

'crashed saucers' end of Polish ufology, and he has self-published six or more separate items titled something like *Hitler's Supersecret Weapon*.

Witkowski tells Cook that his extraordinary information comes from an unnameable source, which Cook seems to accept without question. It seems that a "Polish government official" phoned Witkowski, inviting him to view documents and take notes about the development and concealment of extraordinary Nazi technology, as given in a record of the activities of a special unit of the Soviet secret intelligence service". Witkowski's evidence, together with a visit to Schauberger's grandson, leads Cook to reproduce the material about imprisonment by the US after the war, and the apartment being blown up by the Russians, together with various unlikely claims about Schauberger being offered massive sums of money by (right-wing) Americans in the years before he died. And that Schauberger's designs had been stolen by Heinkel in the early part of the war, that he had worked on secret projects for the Nazis from 1941 through to the end of the war, working at a number of factories, sometimes using slave labour. That he had created, for and with the support of the SS, discshaped machines with engines so revolutionary that even Cook, an aviation journalist, cannot explain how they worked.

As I mentioned, one of the problems with the Nazi UFO mythos is explaining away the absolute absence of palpable evidence. Cook chooses to adopt SS General Hans Kammler for this purpose. Kammler used concentration camp labour to build the Atlantic Wall, contributed to the construction of the Auschwitz gas chambers, and was in charge of the V2 missile programme, which again ruthlessly exploited slave labour. He is also, it seems, the person who spirited away all traces of Schauberger's astonishing technical achievements, allegedly to his own advantage by way of trade with the approaching Allies: however, the earliest version I have found of this story dates from 1989, put about by Nevada Aerial Research, who have done much to publicise the wonders of supposed Nazi technology. They later came up with the first and most unpleasant of the tales of dominant and brutal alien beings living below the US air base at Dulce. I do not believe that their account of Kammler had any existence prior to 1989, or that it is true.

There is no period of history more thoroughly examined than 1939-1945, and no subject more closely examined than the Nazis, and within the Nazis, the SS Had there been any reality in the claims for the construction and testing - or more - of high-speed flying disc technology by the Third Reich during that period, then we would have every reason to expect that it would have been discovered, reported, and analysed by writers and researchers far more competent than those referred to above. Yet it never has

Nonetheless, there is this recurrent and developing counter-culture argument that says that these extraordinary events actually happened. It is a theory that has sold millions of books and a number of deeply unpleasant videos, and it continues to fuel a belief that, given just those few more months, the true genius of the Nazis, the drive of the SS, and the inspiration of the Fuhrer would have won through, and the Allies no, not just the Soviet Union, but all the Allies - would have been defeated. Just imagine how that would have been.

While I'm happy to be challenged by solid evidence, I've found no reason to believe that Viktor Schauberger knew anything of all this: I think he died before it was made up. He never built a flying disc, let alone one that flew using some unknown and unprecedented method of propulsion. He wasn't sought out by Hitler or the SS, didn't choose slave workers from Mauthausen to assist him and wasn't held by the Americans after the war because of his technical knowledge and achievements. If the Russians burned his flat down, I doubt that they even knew whose flat it was. He never worked for years in the USA, and wasn't offered any sums of money to do so. If you want a real mystery to solve, try working out who invented all these tales, and why, and whether anyone apart from the authors involved has gained materially, or in achieving political or personal aims, as a result of their dissemination.



El pelícano es fuerte en sus apreciaciones pero muy razonable

The Pelican once again turns to one of his favourite themes - the sad state of American ufology. In the United Kingdom, and in many other countries, there are three main types of ufologist: the newagers and other believers, who are eager to believe any unlikely story, concerning either nuts-and-bolts or occult UFOs; those for whom ufology is a branch of show business, the writers of popular books, and deliverers of silly lectures illustrated with fuzzy photos and videos; and the very few who attempt to conduct objective investigations and research. In the UK the more objective

In the UK the more objective researchers are aware that even among their own number, some of them are a bit flaky, being a bit too ready to consider incoherent theories or to accept testimony which cannot be independently verified. And, of course, The Pelican can be relied upon to be objective, as he enjoys a bird's eye view of the ufological scene.

American ufology is different. Some of the UFO reports are regarded as being genuine observations of ET craft and there is said to be physical evidence to support some of these stories. Those who wish to be regarded as "Serious Ufologists" sometimes try to distance themselves from the more flambovant, "show-business" types, and then complain that the scientific community still doesn't take them seriously. This is probably partly because they have no promising lines of investigation or research to offer the scientists, but mainly because they are obviously far too credulous. They argue that this apparent credulity is really open-mindedness, but it is in reality a combination of believing what they want to believe and trying to avoid offending friends who believe all sorts of nonsense.

Then there are the not-soserious ufologists. These are the people who will believe any theory of UFOs, so long as it's a silly theory, and the people who write books, give lectures and appear on chat shows telling people what they want to hear about UFOs, which is a lot of fantastic nonsense. For example, a recent thread on the UFO UpDates mailing list started with an open letter from Brazilian ufologist A.J. Gevaerd to Linda Moulton Howe objecting to her presenting the stories told by a notorious Brazilian hoaxer as if they were true, despite the fact that that this person's lies and scams have been exposed many times in the Brazilian media.

Some members of the list actually supported Howe, apparently because Gevaerd hadn't "proved" that the stories were untrue, but Wendy Connors wrote:

"People on this List actually continue to take Linda Moulton Howe's research seriously?

"Unbelievable."

Ufologists were actually preferring to believe the fantastic tales of the hoaxer rather than accept the warnings given by Gevaerd - who is certainly no sceptic - backed up by his colleague Thiago Luiz Ticchetti, who informed list members that they had official documents to prove that the man was a thief and a cheat, and that he was translating them into English for them.

This is something which irritates many European and Latin American ufologists - the American UFO believers apparently have as one of their rules: If it's not in English ignore it. This is because they know that most translations from languages such as French, Spanish and Portuguese are done by believers who give them what they want to read, ignoring serious investigations and critical studies that they would rather not know about.

Thus it is that even the Serious Ufologists get distorted versions of interesting cases because they rely so heavily on the available English translations. Hence the - perhaps deliberate(?) - confusion in the notorious Trindade Island case about the number of witnesses to this event. Coral Lorenzen had claimed that there were at least 100 wit-

nesses, according to the newspaper Ultima Hora. There was also the mysteriously precise figure of 48 witnesses given, without reference, in one of Jerome Clark's encyclopedias. Clark was either unable or unwilling to say where this figure came from. However, the intrepid Magonia team eventually learned. from a long, detailed paper on the case (in Spanish) by Luis Ruiz Noguez, that it was the photographer, Baraúna, who claimed that there were 48 people on deck when he took the photographs, so they were presumably witnesses. For those who are inclined to believe this, it is necessary to consider how he managed to count them amidst the general excitement and while taking his photographs, and also to account for the fact that journalists and others were apparently unable to obtain confirmation from any of these 48 crew members that they had in fact seen the UFO.

Apparently, up to 300 persons could have seen the UFO, if they had been on the deck of the *Almirante Saldanha* at the time of the alleged UFO sighting. However, according to the newspaper *O Globo*, there were no officers or sailors on deck at the time, only Baraúna and his pals.

So it seems that there is no convincing evidence that the photographs are genuine or that there was any UFO to photograph. But this is one of the precious "classic" cases and America's Serious Ufologists remain in denial about the negative evidence. They are also curiously indifferent to the weakness of the evidence and indications of hoaxes or misperceptions in most other cases which are much touted in support of the FTH

Now there is another interesting case which The Pelican would like to examine - Kelly-Hopkinsville. He is scratching about in his nest looking for a detailed report on it and wondering why it has not received attention from the Serious Ufologists. Ah, yes - it's in French...

PELICAN WRITE

HOW TO WRITE A BESTSELLER

Gareth J Medway

Critics of Erich von
Daniken - who has
recently been back in
the news with another book and a
forthcoming ancient
astronaut theme park
- have been undecided whether his
thesis is to be deplored because it is
wrong or because it
is unoriginal.

The idea that modern technology may have been known to the ancients is almost as old as the technology itself. Joseph Ennemoser's History of Magic which first appeared in 1844 (1) suggested that examples of magic such as levitating statues, given by ancient Greek and Roman writers, and usually considered to be fables, were in fact the application of electricity and magnetism. Myths, he considered, contained scientific secrets in allegorical form, for example the twins Castor and Pollux, who represented the north and south pole of magnets.

Frederick
Soddy, in *The Interpretation of Radium*, third edition 1912, having explained how under certain circumstances one element can be transmuted into another, speculated that the writ-

ings of the alchemists were based on partial memories of the learnings of some ancient people: "... such a race could transform a desert continent, thaw the frozen poles, and make the whole world one smiling Garden of Eden. Possibly they could explore the outer realms of space, emigrating to more favourable worlds as the superfluous today emigrate to more favourable continents. The legend of the Fall of Man, possibly, may

be all that has survived of such a time before, for some unknown reason, the whole world was plunged back again under the undisputed sway of Nature, to begin once more its upward toilsome journey through the ages." (2)

When Atlantis became popular in the late nineteenth century, it was naturally supposed that the Atlanteans had an advanced science (which was not, of course, stated in the original Greek writings about the lost continent). One popular exposition, A Dweller on Two Planets, by 'Phylos the Thibetan' which was written in the mid-1880s, based on the author's recollections of his past lives, featured airships which could travel at the then incredible speed of 200 miles an hour. Scott Elliott's The Story of Atlantis, 1896, contained passages like this: "In the later days when war and strife had brought the Golden Age to an end, battle ships that could navigate the air had to a great extent replaced battle ships at sea - having naturally proved far more powerful engines of destruction" (3) Elliott even went into some detail about their construction and propulsion mechanisms. His information, though he did not say so, came from clairvovant investigations that had been carried out by Theosophical Society leaders Annie Besant and Charles Leadbeater.

"Every scientific theory (if we are to believe the popular Catholic press) was anticipated by Roger Bacon and others in the thirteenth century. Some Hindu thinkers go even further and claim that not merely the scientific theo-

ries, but the products of applied science as well, aeroplanes, radio and the whole bag of tricks were know to the ancient Hindus who afterwards dropped them as being unworthy of their attention." (4) These Hindus, some of whose works are reproduced in David Hatcher Childress's Vimana Aircraft of Ancient India and Atlantis (5) were influenced by cultural nationalism: in 1923, when T. K. Ellapa of Bangalore produced a set of diagrams explaining the workings of a Rukma Vimana, the country was militarily and technologically dominated by Britain, but they could take comfort in the thought that thousands of years earlier they had been the race with all the flying machines.

Exactly when extraterrestrials came into the debate is uncertain, but the idea was toyed with by Charles Fort in The Book of the Damned (1919), who spattered this collection of scientific anomalies with speculations such as: "I think we're property. I should say we belong to something: That once upon a time, this earth was No-man's Land, that other worlds explored and colonised here, and fought among themselves for possession, but that now it's owned by something: That something owns this earth - all others warned off'. (6)

As John Keel remarks, such ideas "have long since been a staple storvline with science-fiction writers." (7) Arthur C. Clarke's Expedition to Earth (1953) contained two stories relating to aliens visiting earth in the past. In the same year Desmond Leslie pointed out, among other things, that according to a mediacval Arab writer the builders of the Great Pyramid placed the stones on pieces of papyrus engraved with magical symbols, and thereby flew them from the quarry to the pyramid - obviously a misunderstanding of flying saucer technology. (8) The same, of course, could be said of the miracles of the Bible. This was the basic thesis of Morris K. Jessup, UFOs and the Bible (1956),

I think the most important factor was quite simply that von Daniken was a good writer

Brinsley le Poer Trench's *The Sky People* (1960) and Paul 'Thomas' Misraki, *Les Extraterrestres* (1962).

I should like to refer here to some works of which I have been unable to locate copies, but which I think are summarised adequately in secondary sources. Maurice Denis-Papin, in his Cours Elémentaire d'Electricité générale (1948), suggested that the Ark of the Covenant, being made of wood overlaid both inside and out with gold, would have acted as an electrical condensor. Now, the Bible relates that when the Ark was being transported by Nachon's threshing floor, the oxen shook it and a man named Uzzah put out his hand to prevent it falling. "And the anger of the LORD was kindled against Uzzah; and God smote him there for his error; and there he died by the Ark of God." (2 Samuel 6:7). Denis-Papin interpreted this as his having been electrocuted (9)

The 'science can explain the Bible' theme was also expounded by the Soviet professor Matest Agret in a series of articles in the Literatournaya Gazeta in 1959 and 1960. In one, 9 February 1960, he suggested that the fire from heaven that destroyed Sodom and Gomortha was actually an atomic bomb dropped by extraterrestrials. (10) In America, Max H. Flindt privately published a pamphlet On Tiptoe Beyond Darwin (1962) suggesting that the human race appeared as a result of genetic manipulation by spacemen. (11)

There are several other works that could be mentioned, but the point is that Erinnerungen an die Zukunft (Memories of the Future), which is better known by its English title Chariots of the Gods? (1968) did not contain anything that had not been said before. Yet it was a phenomenal success: by 1980 Erich von Daniken's books had actually sold 42 million copies. (12) A critique, Erinnerungen an die Wirklichkeit (Memories of Actuality), by Gerhard Gadow is

itself said to have sold 85,000 copies in a few months. (13)

Various reasons have been suggested for this popularity by the critics: that education is not working, that conventional religion is declining yet people still want the certainty it offers, and so on. The suggestion that a properly educated person would automatically reject the thesis of Chariots of the Gods? is questionable. The book contains numerous errors that have been pointed out by specialists, but one cannot expect the general reader, even a welleducated one, to have the necessarv expertise in Mesopotamian history, Meso-American iconography, and so on, to spot his mistakes.

(A parallel to this is the frequently observed fact that von Daniken had no qualifications. Yet the ancient astronaut hypothesis was also espoused by writers who were as qualified as anyone could be in such an interdisciplinary field. Morris K. Jessup was an astronomer who had also studied Mayan ruins for the Carnegie Institute, and Barry Downing, author of *The Bible and Flying Saucers*, had degrees in both physics and theology.)

Without begrudging von Daniken his success, it is worth asking: why Chariots of the Gods? rather than another? The Morning of the Magicians, from which von Daniken had lifted some of his examples, sold over one million copies in a decade (14), but that was only a modest success (in comparative terms), and many of the other books on the same theme were destined for obscurity. Who, for instance, ever heard of Egerton Sykes's The Extraterrestrials? (15)

Though to some extent these authors copied one from another, this is not simply a matter of repeated plagiarism. One the notions of extraterrestrial intelligence and space travel have become common, the possibility that aliens might have visited the earth in the past could have occurred to anyone. The archaeologist T. C.



Lethbridge related how, when his wife had nearly finished typing the manuscript of his legend of the Sons of God, "A friend, Group Captain Guy Knocker, sent me a copy of Erich von Daniken's Chariots of the Gods?. The two books were so similar in many ways that I felt tempted to destroy my version. However, I saw that there were points of difference and that this was an interesting example of the often observed phenomenon of a particular idea occurring to people in different parts of the world at the same time. (16)

Ronald Story points out that the film 2001: A Space Odyssey, which appeared at about the same time as Chariots ... contained similar ideas (partly based upon the aforementioned stories in Clarke's Expedition to Earth)' in particular the suggestion that the human race was the result of an extraterrestrial experiment to enhance the intelligence of apes. This, he suggested, helped prime people for a factual book on the theme. (17) But this is a chicken-and-egg matter; it could just as well be argued that von Daniken's book helped promote the film.

Undoubtedly, though, the timing was opportune. The Apollo programme had recently created a general interest in space travel. The sixties were in any case a good time for new ideas: the book "seemed to strike a chord in a generation that had learned to question all forms of authority and accepted wisdom." (18)

In particular people were challenging conventional religion. This had been going on for a long time. Winwood Reade's the Martyrdom of Man (1872), sold well for decades largely owing to its critical summary of the Bible,

which dismissed miracles as a combination of imposture and romantic embellishment. More people had lost their faith by the 1960s, so there was - and still is - a good market for any new view of this subject. Von Daniken's fourth chapter, 'Was God an Astronaut', was a deliberate challenge to the Church. Some of the earlier books, such as Flying Saucers Have Landed and The Morning of the Magicians, had avoided any such direct confrontation.

I think the most important factor was quite simply that von Daniken was a good writer in the sense that he wrote in an accessible, popular way. It must be borne in mind that the biggest retailers of books are those in airport lobbies, as people who do not otherwise read them will buy one to take on holiday. Perhaps the second largest market is of those who need something to occupy themselves with whilst commuting. Such purchasers want an easy read, not anything demanding. Many ancient astronaut writers, however, had a turgid, impenetrable style. So it is easy to see why Chariots of the Gods? should greatly outsell for instance W. Raymond Drake's Gods or Spacemen (19), which was far better researched and rather less well written

Finally, the book had sixteen pages of photographic plates, something most of its predecessors lacked. I don't know how many people buy books just to look at the pictures, but the success of coffee-table books consisting of little else suggest that it is quite a high percentage. So if you want to pen a best-seller (and who doesn't), the best formula is to pick a subject on which several works have already been essayed; which gives some new slant to Christian origins; and is written in a way that anyone can understand, with plenty of pretty illustrations.

Good luck!

For References for this article see back page.



K REVIEWS

BOOM Sold of the Rogerson except where stated

Kevin D Randle. Case MJ 12: the true story behind the government's UFO conspiracies. HarperTorch, 2002. \$7.50.

You've got to give it to the guy, he doesn't give up easily, here is Randle trying to flog the dead horse of Roswell in both senses of the word. Randle's thesis is simple, because an alien spaceship crashed in Roswell, there must have been a secret oversight committee, a sort of real project Magic. Of course this isn't the MJ 12 that all those documents were on about at the end of the eighties, because they were being hawked around by his rival in chief Stanton T. Friedman, oops I

THE TRUE STORY BEHIND THE

GOVERNMENT'S

UFO CONSPIRACIES

meant to say contained all sorts of textual flaws

But don't let that fool you, Kevin knows there was an oversight committee. not just because there had to be one, but insiders have told him so These include the now notorious Frank Kaufman, the usual anonymous sources

and characters who have access to really secret information. Except they don't, there is nothing that these characters come up with that isn't already part of the ufolore. Forgotten bits of the lore are retrieved and presented as amazing inside information.

For example General Arthur Exon regales Randle with a tale how in the 1950s, four jet fighters were lost chasing a flying saucer. Randle can't find any reference to this, so this must be something really secret, because generals don't ever lie. This story struck me as being rather familiar and on pages 215-217 and 256-257 of Donald Keyhoe's Flying Saucer Conspiracy (US

Henry Holt edition), are accounts of "mysterious" plane crashes, not actually involving UFO chases as I'd seemed to remember, but clearly presented in such a context: the latter pages dealing with the crashes of no fewer than six planes over a few days. It seems likely that Exon's story was a half memory of this book.

Then there are the tales told by Robert Sarbacher, another insider who simply repeats bits of the legend. Thus when writing to Willard Smith (himself a crank and contactee groupie) in 1950, Sarbacher simply says there is "something" in the tales told by Frank Scully. By 1983 writing to

William Steinman he adds that "their" material was unusually light and strong (taken from the Roswell Incident by Berlitz and Moore), and that they aliens were like some insects found on earth (taken from Gerald Heard's 1950 book Riddle of the Flying Saucers).

Randle defends the idea of the cover against the obvious objection that there is not

much use in covering up what you don't control, with the argument that as 'they' haven't done anything the military can just sit pretty. But that is an argument from hindsight. In July 1947 the authorities would have had to assume that anything could happen anytime. There would have been no incentive to hind this from the Soviets for another 2 years (when they tested their first Atom Bomb), and the priority would be to release the story with the best possible spin before something dramatic happened. These decisions would have been taken not by middle ranking military officers, but by the top political leadership. President Truman would

know that get this one wrong and he might not just end up impeached, but lynched from the nearest lamppost by his own bowels. No vague "oversight committee" to deal with the situation but the drafting in (not inviting) of America's if not the world's leading physicists from Einstein and Bohr downwards. When you realise that the codewords for the Normandy Invasion became clues for a British national newspaper crossword because the kids who compiled them as a school punishment heard them from their sister's Gl boyfriends you get the idea of how leaky even the best secrets can be.

The almost certain truth is that are no crashed flying saucers, no oversight committees and that opinions in the US military on UFOs range from total debunking to wide eyed belief, in other words they mirror totally the spread of opinions in general society.

Nebojsa Borkovich. Followed: Pacific UFO Mystery. Xlibris, 2002. \$23.00.

Yachtsman Borkovich relates the UFO expenences he claims that he and his crewman Donald Begay experienced during a Pacific yachting voyage. All of which would have the same take it or leave it quality as all other UFO stories, were it not for videos taken. The stills reproduced are of blobs of light which could be anything, and analysts disagree about what the videos show. Needless to say the story starts to escalate from a typical account of LITS to hints of abduction etc, especially when a 'therapist' gets involved, and in his final chapter the author is quoting from the likes of Budd Hopkins and Lynda Moulton Howe. Thus is folklore generated

Owen Davies. Cunning-Folk: popular magic in English history. Hambledon and London, 2003. £19.99.

This is the first full length treatment of the English cunning folk. the village herbalist, astrology, cow doctor, treasure finder, love token maker, and preeminently witch finder and de-speller. Basing his account on trial records and local newspapers, Davies surveys their activities from the early medieval period to the first world war, and their battles with authority both clerical and secular. The cunning folk ranged widely from local intellectuals such as the Harries family with their extensive collection of rare antiquarian books, through to wild characters such as the battling, many times imprisoned Maria Giles, who reads just like a character from a modern soap opera.

The cunning folk were always liminal characters, regarded by the church in the heyday of witchcraft beliefs as enemies even worse than openly "black" witches as they provided subtler traps for unwary souls, and by later generations of official and "respectable: opinion as worthless charlatans. They tended to come not from the poorest sections of society but from the "middling sort" of yeomen farmers, artisans and such, their literacy setting them apart as something mysterious. One might argue that they recruited from intelligent members of these middling sorts who lacked the financial and networking resources to gain more respectable employment. In the later years the more respectable hid their witch discerning and de-spelling activities, behind the facade of herablists, astrologers and other alternative practitioners. They moved with the times, traveling to clients by train, advertising in local newspapers and publishing puff pamphlets. They formed at least part of the client base of the network of the occult bookshops which flourished just as much in the early nineteenth century as they did at the end of the twentieth. Some, such as Warrington's Tho. Harwood would try their hand at ritual magic.

In later chapters Davies examines the relationship between English cunning folk and similar figures across Europe, and looks at the suggested connections with shamanism, and the claims of various pagans to be their successors. Davies argues that the cunning folk operated very much within a Christian world view and would never have considered

themselves pagans. He also suggests that few of the rather idealistic modern pagans would find themselves having much in common with people who whatever else they were, acted as hard headed often cynical business folk.

If we interpret the role of the cunning

person very narrowly, as the discemer of witches, the person who told you whose spell was the cause of your afflictions and offer to remove it for a fee, then we have to agree with Davies that the days of the cunning folk ended when belief in witchcraft ceased to be part of mainstream discourse (it survives still, but belief in real witches is most prevalent in those strict Christian fundamentalist circles where visiting a cunning person would be absolutely taboo). However if we interpret their role rather as discerning and curing supernatural affliction in a more general sense, they surely they live on in the ranks "gutter roots" spiritualism and the numerous psychics who will tell you who is haunting you or your house and

remove them for the right fee. We can ponder why the agents of supernatural affliction have shifted from the living to the dead, but their is still of class of people who

Cunning-Wolk

Popular Magic in

English History

deal with supernatural emergencies.

Perhaps they live on in wider circles, in the vast range of therapies, those for example who will diagnose whose sinful actions towards you (various forms of abuse taking the place of spells) are the cause of your present woes and how you can "confront" them.

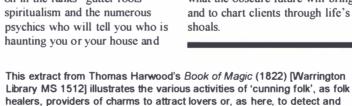
And what of alien abduction discerners, and might not belief in witches spells themselves survive under a variety of euphemisms (psychic attacks, negative vibrations, astral vampirism, negative influences etc). Just as in a theological age, the language of theology was appropriated by folk practitioners in their spells, charms, amulets and invocations. today the official discourse of science, technology, psychology and social work is appropriated by the discerners and healers of supernatural affliction, and those who provide techniques to provoke love or lust, to find riches, see what the obscure future will bring

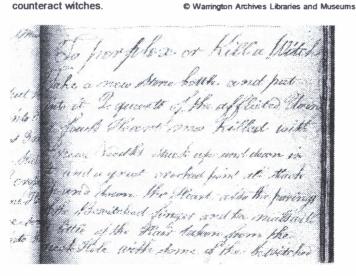
Leslie G Howarth If in Doubt. Blame the Aliens: a new scientific analysis of UFO sightings, alleged alien abductions, animal mutations and crop circles. Writer's Showcase, 2000, £13.99. In this self published book, Howarth, an industrial chemist with a Ph.D. in dental ceramics etc. tries what he imagines is a scientific approach to ufology. This involves a statistical treatment of a mass of reports dredged up from a data base, in this case a ufological CD-ROM. This is not new, it was very much the fashion in the 1960s and early 70s, but with much more sophistication than is shown here. The technique used is something called Kepner-Tregoe analysis; and either Howarth is totally misusing it, or the whole technique is just another piece of management pseudoscience. Needless to say all the judgments used are purely subjective.

He compares various 'explanations' of UFO reports with what he believes the evidence shows. As the evidence consists of a biased database, and the versions of UFO stories found in popular literature, it is flawed from the start. Explanations such as aircraft, astronomical objects etc are taken in isolation, as if anyone thought that each individual explanation accounted for *all* UFO reports. UFO reports are generated by very many different stimuli.

The result, surprise surprise, is that UFO reports are likely to be generated by alien activity. This is achieved by purely subjective reasoning. For example Howarth claims UFO events don't take place in the rain (not true actually), but on this premise he rules out aircraft and stars and planets as not fitting. Excuse me, but isn't it obvious that people will see more things in the sky (whether stars, meteors, aircraft, or alien UFOs for that matter) in clear weather rather than when it's wet and overcast?

One genuine thing of interest that he notes is the great scarcity of UFO reports from the Indian subcontinent, which is quite puzzling given the vigorous English language press, and extensive family contacts with the West. This points to a psychosocial explanation, in which the sort of experiences which give rise to UFO reports in the West do not exist, or are interpreted differently Hindu or Islamic culture.





David G. Bromley and J. Gordon Melton (eds.) Cults, Religion and Violence. Cambridge University Press, 2002. £15.95. This collection of essays centres around the fate of four modern 'New Religious Movements': the Branch Davidians, the Solar Temple, Aum Shinrikyo and Heaven's Gate. These are organisations which found themselves in escalating conflict with the wider world, which led to what Bromley calls 'dramatic denouements', either catastrophic implosion or explosion. This conflict often involved substantial mutual demonisation, the 'cult' accused of various nefarious activities by outer society, and the resulting persecution being interpreted as being assault by the fallen and hence radically evil world.

The various contributors search for meaning in these events, and the factors in the various groups which led to these developments. This is not easy because these groups were very disparate, only the Branch Davidians started out with a classical apocalyptic world view; the Solar Temple for example started out as just another 'metaphysical' self improvement group. Though the various authors look to ideological sources for common threads, the real unifying thread seems more to be the increasingly paranoid behaviour of the group leaders. Murder and suicide are ways of saving face, and of imposing control to the last. In this sense all of these groups act as freelance private enterprise totalitarian statelets, often far more oppressive than any nation state. They would then act as the link between the purely domestic tyranny and the tyrannies of legal states. Their dramatic denouements are large scale versions of the child massacres by enraged patriarchs, of which there is currently a veritable epidemic in Britain, the group being the surrogate children of the patriarch.

The prologue to this book deals with September 11, and the reminder that the movements responsible for this are primarily religious cults aiming at global purification. The obvious parallel with Al Qaeda would with Aum Shinrikyo, in that their hostility is projected outwards against wider society. Both leaders suffered humiliating rebuffs by their cultures; Ashara formed a political party which failed even to reach a

Natural Law Party level of voting, and Bin Laden was rejected by the leadership of Saudi Arabia. Despite their cultural backgrounds their conspiracy theories are derivative from the European radical right.



Marina Benjamin. Rocket Dreams: how the space age shaped our vision of a world beyond. Chatto and Windus, 2003. £12.99.

If there be such things as precognitions, then this elegy to the space age published weeks before the Columbia disaster must be one. Marina Benjamin grew up a wannabe astronaut obsessed with rocket dreams, a harvester of all the collectable trivia of the age. Today the age of the astronauts has passed into history, the visions of its pioneers have become the quaint ambitions of a far gone age. The loss of the space age seems to symbolise the loss of a whole raft of innocences, the gradual closing of all avenues of hope. The grim fate of NASA reminds us just how

totally inimical the hallowed market economy is to grand visions and inspired dreams. It is as totally incapable of organising a programme of grand exploration, as it would be in erecting a pyramid or a grand cathedral.

The drive behind much of the space race was the search for transcendence, an escape from the human condition, and that still remains. Marina Benjamin takes us on an amusing journey to Roswell, and presents an insightful portrait of that place. It's perhaps significant that the Roswell legend began to develop just as the space age began its slow decline. If we can can't go out and meet space, then perhaps we can believe that space has come to us. These days we offered journeys of transcendence and escape in the inner space of virtual reality and cyberspace, rather than among the far stars. Roswell and cyberspace meet in the SETI project which uses a computer screen saver programme to link up PCs around the world to eavesdrop on the radio music of the heavens, in search of a "message" among the static. Some word from the Great Old Ones which would lift us out the mire of history. No matter than any such message would either be a banality, quite irrelevant to the human situation, or, most likely, be quite incomprehensible, or become the focus of innumerable contending cults.

The transcendent vision which came to the astronauts was not of the beckoning planets, but of the earth left behind, this was the vision transmitted back to the eager earth, not the grim grey desert of the dead moon. The one warm oasis in a bleak immensity.

Noretta Koertge (ed.) A House Built on Sand: exposing postmodern myths about science. Oxford University Press, 2000.

The essays in this volume address a variety of critical approaches to science which have got labelled together as 'postmodemist'. One strand of this is the so called 'strong programme' of the sociology of science, developed by David Bloor and Barry Barnes at the University of Edinburgh. This argues that the paths that scientific developments take are profoundly influenced by cultural, economic and political factors. Implicit in this viewpoint is the possibility that science might have taken some quite different paths. Clearly book I devoted many working scientists are unhappy about this, and feel that such approaches lead to a kind of relativism, in which all scientific accounts are nothing more than texts, and tell us nothing about the real world, indeed they suspect that the strong programme denies the existence of the real world at all. Several of the essays in this volume seek to refute some of the main articles in this programme, and to argue that the critics often got their historical facts wrong. Of course the lay reader is not in position to judge between the parties, and some of these essays are very technical.

While in the case of most of the supporters of the strong programme, this is probably not their view (sociologists as working sociologists might 'bracket' or put to one side the question of whether a particular claim is 'true', both for the reason that as sociologists it's not their job to adjudicate on the truth or

P. G. Maxwell-Stuart. Satan's Conspiracy: magic and witchcraft in sixteenth century Scotland. Tuckwell Press, 2001. £16.99.

In this revisionist account of Scottish witchcraft, Maxwell-Stuart challenges the view that the 'evidences' of witchcraft accusations were fantasies produced by torture. Instead he argues that witchcraft accusations were based on a Protestant reinterpretation of occult folk beliefs, particularly those involving the *sithecan* or fairies. The accused were as immersed in this folkloric world as anyone else. Their stories were not just 'made up' under interrogation, but were derived from the sort of visionary and anomalous experiences which today give rise to beliefs in ghosts, channeling and spirit guides. We might regard people like Elizabeth Dunlop who claimed to have met the Queen of Fairy as the abductees of their time.

In this climate it would have been entirely rational for political foes to have sought occult means of doing down their opponents, as Boswell was said to have

done in employing witches to try and drown James VI. The background to many of these accusations was the Reformed Kirk's assault on Catholicism. What we might call folk shamanism became literally demonised by the new church, which saw all spirits as devils out to seduce the faithful. Ambiguous and intermediate supernaturals had no place in their world view, and the *sithean* were to go the way of angels, holy wells and saints. This mirrored attempts to centralise royal power, and remove layers of intermediate allegiance.

The contents of dreams, hallucinations and visions are just as much cultural products as broadsides and TV soap operas; having the same reciprocal relationship that popular imagination and the media have today. The religious struggle becomes a struggle for the imagination. The Scottish witchcraft material illustrates the process of this contest, with the production of hybrid narratives in which traditional folk and elite ideological motifs contend and merge.

otherwise of scientific claims, and that such judgements can often only be made with the benefit of hindsight. My feeling on the dispute between sociologists of science and their critics is that the jury is still out. Both sides make valid points and both can make extreme statements.

However there are other approaches which are far more radical, and a fair proportion of this book is devoted to critiques of

deconstructionism and forms of feminist and ethnocentric science Much of this stuff is a good deal more entertaining because nonsense, whether the empty verbiage of many deconstructionists, or the sheer absurdity of some "feminist" attacks on science, is always good for a laugh. Sadly some of this stuff can be rather more sinister when it escapes

from its confinement in American academe. As the last chapter by Indian writer Meera Nada shows, radical relativism and notions of culturally specific sciences are grist to the mill of radical rightist anti modernist politicians the world over. Yes, there are people on the fringes who would deny the world is actually spherical, and not a flat disc lying on an endless re-

gress of turtles.

It will be an interesting topic for future sociologists to discover why a number of people who imagine they are radicals of one sort or another came to adopt what are essentially High Tory views of culture and society: cultures are sacred institutions, the product of the immutable wisdom of the ancestors, and must not be challenged. Any change must at best be slow and gradual; each

culture is the product of the special genius of a particular volk and each volk has its own brand on reality, etc., etc. The end product of this kind of reasoning must be the revisioning of Jefferson Davies as a third world liberation leader protecting the southern cultural

authenticity against the Imperialist, Capitalist North and its myth of universal human rights. "Slavery may be wrong in New England culture, but you can't impose your cultural values on us in Dixie, we have our own cultural reality" And of course we in Europe would be too busy burning witches at the stake to care either way.

Sian Busby. A Wonderful Little Girl: the true story of Sarah Jacob the Welsh fasting girl. Short Books, 2003. £9.99.

In a 1869, a year on the cusp of the modern age, a 12 year old girl in a remote part of Camarthenshire which was itself being initiated into modernity by the railway, lies in her bed apparently taking no food. After an episode of what might have been viral encephalitis, Sarah Jacob, a physically and intellectually precocious girl takes to her bed, and has fits every time some one tries to feed her. Under medical advise her family stop feeding her. They make a solemn vow not to feed her unless she asks for it. The family, the local doctor and the minister seem unsuspicious of the facts that she doesn't get emaciated, still passes faeces and urine, and doesn't develop bed sores. For them she is a sign of the transcending of the gross physicality of the human condition, she really is a girl "who lives on the air and wants no milk nor honey". Because this is taking place in the dawn of the modern age, there is pressure to put the miracle to scientific test, and a scientific watch is put on the girl. Of course once she really is deprived of food she wastes away and dies, steadfastly refusing to ask for food, and no-one will push her to take it.

The mystery here is the one we continually encounter, that of the human motivation. Though some sceptics thought there were

financially motives for fraud (Sarah became a lucrative tourist attraction), this really does not seem to be anything like the whole case. How could the local doctor and minister have been so drawn in? Their answer is one we hear over and over again: 'these people are totally honest, they have no motivation for lying', and the unspoken one: 'No peasant girl could get one over one me'. And also as Busby makes clear, because this is the very dawn of the modern scientific world, what is obviously impossible to us was by no means as clear cut to them. After all this was the sort of locality in which all manner of signs of wonders would manifest themselves during the Great Revival nearly 40 years later.

In the annals of science Sarah has gone down as a pioneer anorexic, but Busby argues that descriptions of her do not paint a picture of emaciated anorexia. Though Busby does not go down this route, I'd be tempted to look in the direction of Munchhausen's Syndrome. The fits and fasts were the means by which Sarah could prolong the solicitous attention she had received during her real illness. It was also an escape from the future of backbreaking labour and baby breeding which was the lot of women in her situation. In the end Sarah allows herself to starve to death rather than break the game and force her parents to admit to themselves that she had deceived them.



Quelle horreur!! When I dragged the Spring 1978 issue of MUFOB down from the squirrel-haunted attics of Magonia Towers, what do I find but a special issue proclaiming its tenth anniversary. Which by my calculations means that we have now been chuming this stuff out for a magnificent total of thirty-five years (an anniversary with a special resonance for old Round the Horne listeners.)

Donald A Johnson contributed a well argued article explaining how the non-physical components of a UFO report might be subjected to the same sorts of structured investigations that could be used for the analysis of physical data.

A trio of article by Peter Rogerson, Roger Sandell and myself, looked back over the ten years of the magazine. Did any of us at the time think that we would be still going strong into a new century? Peter summarises what had been learned in those ten years, and thought about how research might progress. Unlike some earlier projections I have reported in this column, his suggestions do seem to have borne fruit.

Certainly, as he suggested, historical research has moved beyond mere collecting of old newspaper clippings: "Events such as the airship flaps [...] cannot be studied in isolation from their general historical and cultural context. Is it coincidence that areas of high airship reportage in 1897 were also areas of populist agitation? What was the exact relationship between the British airship panics and general war hysteria?"

These issues have been investigated very comprehensively by researchers such as David Clarke and Nigel Watson.

Martin Kottmeyer has more than answered Peter's question "What part did the SF of the 1920s and 30s play in the development of UFO ideology?"; and David Sivier has addressed Peter's other question, "How did the occultist and spiritualist fantasies of the late 19th century influence science fiction?"

And I'm proud to say that in the intervening years these researchers, and many others, have chosen to publish their findings in *Magonia*.



UnConventional Sceptics fail to be shocked, horror

April Fools' Day behind us and the next big event is the annual Fortean Times UnConvention. Staged in the Commonwealth Institute - a building which once housed exhibits from a great family of nations but is now an empty shell ... perhaps we're getting too close to political allegory here, back to the UnConvention!

This year's programme seemed rather thinner than previously, and this was only partly due to the last minute withdrawal of two Fortean superstars, Jon Ronson and Graham Hancock. Partly it was also due to the lack of a theme to the event. Last year's show got a lot of promotion through the "Death of Ufology" tag that caught the attention of the media, culminating in the notorious 'Brains Trust' which ended the event with a six-on-one wellying of ufology's Prince of Postmodernism, Colin Bennet. (Although not a speaker, Bennet was around this year, promoting his books at the Paraview stall and keeping a wary eye out for retributive attacks by angry ledger clerks)

So fewer talks, fewer (I reckon) visitors, but too much Kal Korff. Not that I've got anything against him personally, but six hours of the guy over two days is pushing it a bit. I saw two of his presentations - 'The World's Greatesty Hoaxes' and a 'Special Workshop' on the alien autopsy. Neither of which were what it said on the box.

'The World's Greatest Hoaxes' turned out to be basically a promotion for Korff's forthcoming book on Billy Meier; and the alien autopsy 'workshop' a rather discursive look at the Roswell events. In both cases Korff concuded that they were - gulp - not real!

One of the problems with inviting American speakers to events in Britain such as UnCon is their lack of understanding of the sophisticated nature of the Fortean community in this country. It was amusing when, during Korff's presentation on Roswell he asked an audience of about 300 people how many thought that the events at Roswell were the result of extraterrestrial intervention. The expression on his face, and the sudden change of gear, when not one

hand was raised, was a pleasure to see.

Similarly, the fact that Billy Meier's photographs of Spielbergian spaceships could be proven to be fakes didn't really set the audience alight. The far more interesting questions of why and how Meier managed to set up a flourishing saucer cult on the basis of these dodgy pictures was glossed over.

I think Korff's presentations pointed out the differences between American and British scepticism. American ufology seems polarised between 'believers' (I know Serious Ufologists in the US hate the term, but I can see no other way of describing them) and 'skeptics.' By and large these two groups have come into the field through different paths, the skeptics largely approaching it from the crypto-evangelising approach of CSICOP, with an a priori position of disbelief.

In Britain the distinction is not so clear-cut. Most sceptical ufologists being just that: people who have, through a serious and often very long involvement in the subject, come to sceptical conclusions. Typical of these are Andy Roberts and David Clarke, both of whom gave fascinating presentations to the UnCon, neither of them on strictly UFO-related topics (Clarke on the Angel of Mons and war apparitions, and Roberts on a controversial 'death-ray inventor of the 1930).

The readers of Fortean Times and the attendees at this UnCon were young, mostly in their twenties and thirties, intelligent - some very sharp questions were asked; well-informed - the audience participation at the end of the talks contributed greatly to their value; deeply interested in the wide range of ufological, Fortean and paranormal data. Yet none of them believed that Roswell had an extraterrestrian explanation.

Damned skeptibunkers and pelicanists!

Urban (Transit) Legend

Long-time Magonia readers can scarcely have failed to notice our curious fringe interest in urban legends about trams (streetcars to US readers). Another one cropped up when we met a Magonia subscriber from Nottingham, where a new tram system is about to open. Apparently while still in the plan-

ning stages, the local authorities brouight over a modern tram, of the type to run in the city, from the manufacturers in Europe and put it on show in the city centre. Eventually, it was removed. Immediately stories started to circulate that instead of the sleek, modern vehicle on show, when the system opened it would be operated with clapped-out second hand vehicles brought as a job lot from Poland! The trams are now running, they're brand new, and they're not from Poland!

Don't forget, if you want more unconfirmed urban legends and wild rumours, come along to the Magonia Readers meetings at the Railway pub, Putney, first Sunday of each month, from 7.15

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